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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/853,535      | 05/11/2001  | Hiroyuki Abe         | 791_144             | 7497             |

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| EXAMINER |
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TOATLEY, GREGORY J

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| ART UNIT | PAPER NUMBER |
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2836

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/853,535

Applicant(s)

ABE, HIROYUKI

Examiner

Gregory J. Toatley, Jr.

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement received August 2, 2001 has been considered and entered into the application. See attached 1449.

### ***Specification***

3. The examiner respectfully suggests that the Applicant carefully review the specification for idiomatic and grammatical errors, which may have inadvertently overlooked.

### ***Art Rejection Rationale***

At the outset, the examiner notes that claims are to be given their broadest reasonable interpretation during prosecution. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404, 162 USPQ 541, 550 (CCPA 1969); In re Yamamoto, 740 F.2d 1569, 222 USPQ 934 (Fed. Cir. 1984); Burlington Indus. V. Quigg, 822 F.2d 1581, 3 USPQ2d 1436 (Fed. Cir. 1987); In re Morris, 43 USPQ2d 1753, 1756 (Fed. Cir. 1997). In responding to this Office action, applicants are reminded of the requirements of 37 CFR §§ 1.111 and 1.119 that applicants specifically point out the specific distinctions believed to render the claims patentable over the references in presenting responsive arguments. See M.P.E.P. § 714.02. The support for any amendments made should also be specifically pointed out. See M.P.E.P. § 2163.06.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the reference of Gilbreth et al. (US 6487096 B1) in combination with the reference of Luongo et al. (US 6215202 B1).

a. The reference of Gilbreth et al. discloses a secondary battery based energy storage and power compensation system which includes an interconnected electric power supply system, electric load (18), and electric storage system (20); and a power conversion system (22, 16 and 14) connected there between, where the battery operates to effect peak shaving and load leveling (see col. 5, lines 17 – 26 and “Stand-alone Transient” in col. 18.) The operation of putting the battery in connection with the load in order to provide power during a voltage sag or interruption is also disclosed. The reference of Gilbreth et al. is silent regarding the isolation of the power supply from the system via a switch as claimed. The reference of Luongo et al. discloses a power supply system which includes the function of isolating the main power source from the load through the use of a switch when the voltage sags or is interrupted (see col. 9, lines 40 – 65). It would have been obvious to one having ordinary skill in the art to incorporate the teaching of isolating of a power source that is in a fault condition from a load into the invention of Gilbreth et al. in order to protect the system from instability that may arise from the fault condition of the power source.

b. Regarding the switch claimed being "high speed" the examiner wishes to take official notice of the fact that it would have been known to use "high speed" switches, such FETs or high speed relays, in order to better limit the switching transients which may arise in a slower acting switch. It would have been obvious to one having ordinary skill in the art to incorporate a "high speed" switch into the invention of the reference of Gilbreth et al. which has been modified by the teaching of the reference of Luongo et al. in order to further ensure stability of a system during a fault (undervoltage, interruption) condition. The reference of Gilbreth et al. discloses that any type of energy storage (battery, flywheel, ultracap) device could be used in the system. It is silent regarding the specific type of battery used. It would have been obvious to one having ordinary skill in the art to use any type of high density, high discharge (ultracap, flywheel) energy storage device (including the claimed sodium sulfur battery claimed in claim 2), since beyond needing a high discharge and energy density (inherent requirements of the systems of both Gilbreth et al. and Luongo et al.) the applicant has not disclosed that the use of a high temperature battery is for any particular purpose or serves a specific function and the system would work with any high density, high discharge device such as an ultracapacitor or flywheel.

c. Regarding the specific output capability of the energy storage device as claimed in claim 3, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a battery with a power output of 3 to 8 times the load leveling or peak shaving level, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

d. Regarding the fluctuation compensation of as claimed in claim 5, the reference of Gilbreth et al. discloses such compensation, see col. 4, lines 46 – 59.

e. Regarding a spare battery as claimed in claim 6, the examiner would like to take Official Notice of the fact that the provision of spare or backup batteries in battery powered electrical system is well known. It would have been obvious to one having ordinary skill in the art to provide the Luongo et al. modified system of Gilbreth et al. with a spare battery as claimed in order to provide an additional failsafe in the system in the event that the main batteries fail as is well known in the art.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references of Gilbreth et al. and Luongo et al. as applied to claim 1 above, and further in view of the reference of Paul et al. (US 5332927 A). The references of Gilbreth et al. and Luongo et al. teach of all the feature of claim 1 as stated above, but are silent regarding the use of a backup generator and the control of the energy storage device to provide power to the load while the backup generator is warming up as claimed in claim 4. The reference of Paul et al. teaches of such a back up generator and energy storage device control in col. 3, lines 27 – 50. It would have been obvious to one having ordinary skill in the art to further modify the invention of Gilbreth et al. with the backup generator and energy storage control of the reference of Paul et al. in order to provide an additional failsafe function to a fault intolerant load and to provide a backup generator the time required to come up to a proper operational level before connecting it load.

***Examiner's Note***

7. Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice. Applicant must seasonably challenge well

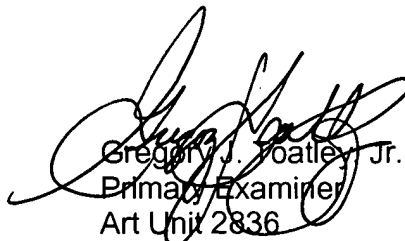
known statements and statements based on personal knowledge. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well-known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). See MPEP 2144.03, paragraphs 4 and 6.

***Pertinent Prior Art***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference of Tanaka et al. (US 6577103 B2) is the resultant patent of the prosecution of the application US 09/815963. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Toatley, Jr. whose telephone number is 703-308-7889. The examiner can normally be reached on Mon. - Fri. 7:00 a.m. to 3 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703) 308-3119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

  
Gregory J. Toatley, Jr.  
Primary Examiner  
Art Unit 2836